## **Appendix 9**

## **Forest Plan Compliance**

Wallowa-Whitman and Umatilla National Forests Standards and Guidelines

## Appendix 9 Forest Plan Standards and Guidelines Water and Soil Resources and Minerals Management Umatilla and Wallowa Whitman National Forests

Wallowa-Whitman National Forest (USDA 1990)

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WWNF Forest Plan Reference number	Standard and Guideline: WATERSHED (4-22 through 4-26)	Compliance Discussion
1	Conflicts With Other Uses. Give management and enhancement of water quality, protection of watercourses and streamside management units, and fish habitat priority over uses described or implied in all other management standards or guidelines.	Met under Alternative 3 to the extent possible (36CRS Part 228, Subpart A). See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. See also Appendix 7 (Analysis of Effects for each Plan) and the Water Resources section of
2	Water Quality Standards and BMP's. Meet Water Quality Standards for waters of the States of Oregon (Oregon Administrative Rules, Chapter 340-41) and Idaho through planning, application, and monitoring of Best Management Practices (BMP's) in conformance with the Clean Water Act, regulations, and federal guidance issued thereto.	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. See also Appendix 7 (Analysis of Effects for each Plan) and the Water Resources section of Chapter 3 of the EIS.
3	Use the following process in cooperation with the States of Oregon and Idaho:	See below
За	Select and design BMP's based on site-specific condition, technical, economic, and institutional feasibility, and the water quality standards for those waters potentially impacted. (See Watershed Management Practices Guide for Achieving Soil and Water Objectives, Wallowa-Whitman NF.)	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. See also Appendix 7 (Analysis of Effects for each Plan) and the Water Resources section of Chapter 3 of the EIS.

3e	Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMP's do not perform as expected.	Met under Alternatives 2 and 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. Also see Chapter 2 of the EIS for discussion of the minerals administration annual monitoring and inspections.
3f	Adjust BMP design standards and application when it is found that beneficial uses are not being protected and water quality standards are not being achieved to the desired level. Evaluate the appropriateness of water quality criteria for reasonably assuring protection of beneficial uses. Where appropriate, consider recommending adjustment of water quality standards.	Met under Alternatives 2 and 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. Also see Chapter 2 of the EIS for discussion of the minerals administration annual monitoring and inspections.
4	State Water Quality management Plans. Implement (Oregon) State Water Quality Management Plans on lands administered by the USDA Forest Service as described in Memoranda of Understanding between: The Oregon Department of Environmental Quality and U. S. Department of Agriculture, Forest Service (2/12/79 and 12/7/82), and "Attachments A and B" referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest lands in the Pacific Northwest 12/78 and Best Management Practices for Range and Grazing Activities on Federal Lands, respectively).	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water quality (i.e. stream temperatures, turbidity). Also see discussion regarding compliance with the 2010 John Day Basin TMDL in Appendix 7 under "Other Potential Water Resource Impact" and in the Water Resources section in Chapter 3 of the EIS.
5	Mitigation. Mitigate negative impacts causing reduction in water quality to return water quality to previous levels in as short a time as possible. (It is recognized that short-term reductions in water quality may result from some activities. For example, turbidity may increase for several days following bridge or culvert installation.)	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water quality (i.e. stream temperatures, turbidity). See also discussion in the Water Resources section of Chapter 3 of the EIS and Appendix 7 (Effect Analysis for each Plan)

7	Stream Temperatures. Prevent measurable temperature increases in Class I Streams (less than a 0.5 degree Fahrenheit change). Temperature increases on SMU Class II (and fishbearing SMU Class III) streams will be limited to the criteria in State standards. Temperatures on other streams may be increased on to the extent that water quality goals on downstream, fishbearing streams will still be met. Normally stream shade management on Class III streams will differ little from treatment on Class II streams.	Met under Alternatives 2 and 3. Miners do not proposed to remove any trees that provide stream shade. In addition, those miners that proposed to withdraw water from streams must be in compliance with ODEQ John Day Basin TMDL which does not allow for increases in stream temperatures.
8	Channel Stability. Maintain natural large woody debris, plus trees needed for a future supply, top protect or enhance stream channel and bank structure, enhance water quality, and provide structural fish habitat within all SMU classes. Quantities and sizes will be determined on a case-by-case basis.	Met under Alternatives 2 and 3. Miners do not propose to remove any trees providing stream side shade or bank stability.
11	Conduct Cumulative Effects Analyses. When project scoping identifies an issue or concern regarding the cumulative effects of activities on water quality, stream channels, or fish habitat a cumulative effects assessment of these effects will be made. This will include land in all ownerships in the watershed. Activities on National Forest Service lands in these watersheds should be dispersed in the time and space to the extent practicable and at lease to the extent necessary to meet management requirements. On intermingled ownerships, coordinate scheduling efforts to the extent	Met under Alternatives 2 and 3. See the cumulative effects section in the Water Resources section of Chapter 3 of the EIS.
12	Alter watershed conditions only to the extent that aquatic and riparian goals will still be met and other valid water uses, such as irrigation, will not be adversely affected. When planned projects are likely to adversely affect watershed conditions, a hydrologic analysis will be conducted considering past, present, and future activities. If the results of this analysis indicate that the proposed project would adversely affect watershed condition, the project will be altered. This may include such things as deleting or rearranging harvest units in timber sales, selecting different silvicultural prescriptions, or delaying	Met under Alternative 3. See Appendix 1A (Site- Specific WRPMs) and Appendix 2 (General Requirements) for measures that protect and enhance aquatic and riparian goals and ensure protection of water quality. See Appendix 3 (Structures inside the RHCAs) and Appendix 7 for effects
13	Groundwater. All projects or activities (including but not limited to pesticide application, fertilizer application, or storage of potentially hazardous volumes of fuels and other chemicals on Nation Forest System land) with the potential to adversely affect surface or ground waters, will include constraints and/or mitigation measures designed to prevent contamination, and will include a plan for dealing with accidental spills	Met under Alternative 3. See Appendix 2 (General Requirements H 1 – H12) for protection measures related to chemicals.

14	Floodplains. Address in all projects environmental analyses the presence of, and potential impacts, to any floodplain within the project area.	Met under Alternative 3. Impacts to floodplains are avoided or mitigated under Alternative 3. See Appendix 1A (Site-Specific WRPMs) and Appendix 2 (General Requirements) for protection and restoration measures. See also Appendix 7 which discusses compliance with Executive Order 11988 (Protection of Floodplains).
16	Permit short-term adverse impacts on floodplains only in conjunction with specific mitigation measures designed to minimize the impacts. Where activities adversely affect natural floodplains, the floodplains will be restored, to the extent practicable, shortly after the activity has ceased.	Met under Alternative 3. Impacts to wetlands are avoided or mitigated under Alternative 3 See Appendix 1A (Site-Specific WRPMs) and Appendix 2 (General Requirements) for protection and restoration measures. See also Appendix 7 which discusses compliance with Executive Order 11988 (Protection of Floodplains).
17	Wetlands. Address in all project environmental analyses the presence of, and potential impacts to, any wetlands within the project area. Particular attention will be paid to protection of springs during road location, timber sale plans, and range allotment management plans. Adverse impacts to wetlands will be avoided or mitigated.	Met under Alternative 3. Impacts to wetlands are avoided or mitigated under Alternative 3. See Appendix 1A (Site-Specific WRPMs) and Appendix 2 (General Requirements) for protection and restoration measures. See also Appendix 7 which discusses compliance with Executive Order 11990 (Protection of Wetlands).
26	Mining Activities. Protect watershed values to the fullest extent possible under existing laws in evaluating and developing mineral operating plans.	Met under Alternative 3. See Appendix 1A (Site-Specific WRPMs) and Appendix 2 (General Requirements) for protection and restoration measures. See also discussion in Appendix 7 which evaluates the effects of proposed activities by Plan.

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27	When areas within 100 feet of Class I, II, or III streams or other perennial water bodies are disturbed by mining activities, they shall later be restored by the operator to equal or comparable condition. This restoration will occur whenever the operator is finished with an area that is large enough to logically restore. An inventory of existing conditions should be performed by Forest Service before approval of the operating plan is given. If this is not possible, then the inventory shall be performed before mining operations begin, with an amendment made to the operating plan. This inventory will determine:  (a) Densities of trees, riparian brush (alders, willows, etc.), nonriparian brush, and herbaceous vegetation.  (b) Fish habitat suitability (expressed as percent of habitat optimum). The inventory method used will be Cow-Fish 1/ or a similar	Met under Alternative 3. See Appendix 1A (Site-specific WRPMs) and Appendix 2 (General Requirements) for post-activity restoration requirements. Also see discussion in Appendix 7 which evaluates the effects of proposed activities by Plan under Alternatives 2 and 3.  NOTE: References to Class I, II, or III streams has been replaced by Category 1, 2, and 4 streams due to the amendment to the Forest Plan to include PACFISH.
28	Require the mining operator, as part of the restoration process to:  (a) Plant trees and riparian brush at spacings that will achieve the original densities of these types. This spacing will at least be equal to what existed originally, except when the original densities were too great for good growth.  (b) Plant grass to achieve a density equal to or greater than the total of the original herbaceous plus nonriparian brush types—	Met under Alternative 3. See Appendix 2 (General Requirements) for reclamation requirements post activity.
29	Require the mining operator, as part of the restoration process, to (where appropriate):  (a) Construct a temporary fence to exclude livestock from the planted area if needed for protection from livestock grazing.  (b) Place whole trees, construct habitat enhancement structures, or perform comparable improvements within the stream channel at a density required to bring the fish habitat suitability index up to the same value that existed before the mining operations began. This is needed if instream work has disrupted the fish habitat suitability index of five or more percentage units.  The estimated costs of the above operator	29 a. n/a. There is no livestock grazing in the project area.  29b. n/a. The miner will not be placing any trees or habitat structures in the stream channels
30	Evaluate and restore all other surface areas impacted by mining as in the previous paragraphs except for those items dealing with fish habitat.	Met under Alternative 3. See discussion in Appendix 7 which evaluates the effects of proposed activities by Plan and alternative. See Appendix 2 (General Requirements) for reclamation requirements.

31	Water Rights and Instream Flows. File for water rights in accord with State law and FSM 2500.	Met under Alternative 2 and 3. They must be in compliance with State law and FSM 2500 and the John Day Basin TMDL.
32	Protect instream flow on Nation Forest System lands through critical analysis (via NEPA) of proposed water uses, diversions, and transmission applications and renewal of permits. Protections may be achieved through filing protests with States where applications are made that adversely affect National Forest resources, asserting claims for this water under Federal or State laws where applicable, inserting protection measures into special use permits, or reaching formal agreements over use. Purchase of water rights and impoundments are other means for reducing these impacts. (Also see Standards and	NEPA analysis of proposed water withdrawals on stream flow and stream temperatures occurred under Alternatives 2 and 3. The Plans that propose to withdraw are required to be in compliance with the John Day Basin TMDL (2010).

WWNF Forest Plan Reference	General Riparian Area Management	Compliance discussion
RA-2	Trees may be felled in Riparian Habitat Conservation Areas when they pose a safety risk. Keep felled trees on site when needed to meet woody debris objectives.	Met under Alternative 3. See Appendix 2 (General Requirements)
RA-3	Apply herbicides, pesticides, and other toxicants, and other chemicals in a manner that does not retard or prevent attainment of Riparian Management Objectives and avoids adverse effects on inland native fish.	n/a. None proposed for use under either Alternative. Only mechanical treatment allowed. See Appendix 2 (General Requirements).
RA-4	Prohibit storage of fuels and other toxicants within Riparian habitat Conservation Areas. Prohibit refueling within Riparian Habitat Conservation Areas unless there are no other alternatives. Refueling sites within a Riparian Habitat Conservation Area must be approved by the Forest Service or Bureau of Land Management and have an approved spill containment plan.	Met under Alternative 3. See Appendix 2 (General Requirements).

WWNF Forest Plan Reference number	Watershed and Habitat Restoration	Compliance discussion
WR-1	Design and implement watershed restoration projects in a manner that promotes the long-term ecological integrity of ecosystems, conserves the genetic integrity of native species, and contributes to attainment of Riparian Management Objectives.	Met under Alternative 3. See Appendix 1A (Site-Specific WRPMs) and Appendix 2 (General Requirements)

PACFISH (Amended to the WWNF Forest Plan)	Minerals Management	Compliance discussion
MM-2	Locate structures, support facilities, and roads outside Riparian Habitat Conservation Areas. Where no alternative to siting facilities in Riparian Habitat Conservation Areas exists, locate and construct the facilities in ways that avoid impacts to Riparian Habitat Conservation Areas and streams and adverse effects on inland native fish. Where no alternative to road construction exists, keep roads to the minimum necessary for the approved mineral activity. Close, obliterate and revegetate roads no longer required for mineral or land management activities.	Met under Alternative 3. Compliance with PACFISH MM-2 is required. See Appendix 3 (Structures inside an RHCA) and the Water Resources section of Chapter 3 of the EIS.
MM-3	Prohibit solid and sanitary waste facilities in Riparian Habitat Conservation Areas. If no alternative to locating mine waste (waste rose, spent ore, tailings) facilities in Riparian Habitat Conservation Areas exists, and releases can be prevented and stability can be ensured, then:	Met under Alternatives 2 and 3. It is part of minerals administration annual monitoring. See Appendix 2 (General Requirements) and Chapter 2 of the EIS which identifies items to be monitored and inspected.
ММ-За	Analyze the waste material using the best conventional sampling methods and analytic techniques to determine its chemical and physical stability characteristics.	Met under Alternative 3. See Appendix 2 for General Requirements related to Lode mining, discharge of adit water, and use of adit water for processing. See Water Quality discussion in the Water Resources section of Chapter 3 of the EIS. See Appendix 7 for effects analysis by Plan of
MM-3b	Locate and design the waste facilities using the best conventional techniques to ensure mass stability and prevent the release of acid or toxic materials. If the best conventional technology is not sufficient to prevent such releases and ensure stability over the long term, prohibit such facilities in Riparian Habitat Conservation Areas.	Met under alternative 3. Site specific plans detail proposed actions. Water quality laws insure compliance, mitigation measures and monitoring listed in chapter 2, describe actions and criteria that will prevent potential problems.
ММ-3с	Monitor waste and waste facilities to confirm predictions of chemical and physical stability, and make adjustments to operations as needed to avoid adverse effects to inland native fish and to attain Riparian Management Objectives.	This is met under Alternative 2 & 3 under 36 CFR 228.4 (e) & (f). Give the District Ranger the authority to require a proposed modification to the Plan of Operations and when required, the completion of an environmental analysis.

MM-3d	Reclaim and monitor waste facilities to assure chemical and physical stability and revegeation to avoid adverse effects to inland native fish, and to attain the Riparian Management Objectives.	This is met under Alternative 2 & 3 as 36 CFR 228.8(g) requires the operator to reclaim the operation by taking such measures as will prevent or control onsite and off-site damage to the environment and forest surface resources see this regulation for more
MM-3e	Require reclamation bonds adequate to ensure long- term chemical and physical stability and successful revegetation of mine waste facilities.	This is met under Alternative 2 & 3 as 36 CFR 228.13gives the district ranger the authority to require a reclamation bond prior to the approval of the Plan of Operation.
MM-6	Develop inspection, monitoring, and reporting requirements for mineral activities. Evaluate and apply the results of inspection and monitoring to modify mineral plans, leases, or permits as needed to eliminate impacts that prevent attainment of Riparian Management Objectives and avoid adverse effects on inland native fish.	This is met under Alternative 2 & 3 as 36 CFR 228.7 requires inspections, and the FSM 2800 outlines requirements for FS inspections. Additional site specific requirements are listed in chapter 2 under mitigation and monitoring measures.

WWNF Forest Plan Reference number	Standard and Guideline: SOILS (4-21)	Compliance discussion
1	Conflicts with Other Uses. Give maintenance of soil productivity and stability priority over uses described or implied in all other management direction, standards, or guidelines. Exceptions may occur for such things as campgrounds or transportation facilities when it is determined, through environmental analysis, to be in the public interest.	Met under Alternative 3. See Soil Resources section in Chapter 3 of the EIS for discussion and Appendix 1A (Site-specific WRPMs) and Appendix 2 (General Requirements) for soil protection and reclamation
2	Protection. Minimize detrimental soil conditions with total acreage detrimentally impacted not to exceed 20 percent of the total acreage within the activity area including landings and system roads. Where detrimental conditions (see glossary) affect 20 percent or more of the activity area, restoration treatments will be considered. Detrimental soil conditions include compaction, puddling, displacement, and severe	Met under Alternative 3. See Soil Resources section in Chapter 3 of the EIS for discussion and Appendix 1A (Site-specific WRPMs) and Appendix 2 (General Requirements) for soil protection and reclamation
5	Re-establish vegetation following wild fire or management activities where necessary to prevent excessive erosion.	Met under Alternative 3. See Soil Resources section in Chapter 3 of the EIS for discussion and Appendix 1A (Site-specific WRPMs) and Appendix 2 (General Requirements) for soil

## **Umatilla National Forest**

Umatilla National Forest		
Uma NF Plan Reference number	Standard and Guideline: WATER (4-77 through 4-79)	Compliance discussion
	General	
1	Meet (MR) or exceed state requirements in accordance with the Clean Water Act for protection of waters of the State of Oregon (Oregon Administrative Rules, Chapter 340-41), and the State of Washington (Washington Administrative Code, Chapters 173-201 and 202), through planning, application, and monitoring of Best Management Practices (BMP's) in conformance with the Clean Water Act, regulations, and Federal guidance.	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. See also Appendix 7 (Analysis of Effects for each Plan) and the Water Resources section of
3	In (sub)watersheds where project scoping identifies an issue or concern regarding the cumulative effects of activities on water quality, quantity, or stream channels, a cumulative effects analysis will be performed. The analysis will include land in all ownerships in the (sub)watershed. Activities on national forest lands in the (sub)watersheds should be dispersed over time and space to the extent practicable, and at least to the extent necessary to meet MR's. On intermingled ownerships, coordinate scheduling efforts to the extent practicable.	Met under Alternatives 2 and 3. See the cumulative effects section in the Water Resources section of Chapter 3 of the EIS.
4	Meet the direction and processes for management of wetlands and floodplains in accordance with EO 11990 and EO 11998 and FSM 2527 (MR).	Met under Alternative 3. Impacts to wetlands and floodplains are avoided or mitigated under Alternative 3 See Appendix 1A (Site-Specific WRPMs) and Appendix 2 (General Requirements) for protection and restoration measures. See also Appendix 7 which discusses compliance with Executive Order 11988 (Protection of Floodplains) and Executive Order 11990 (Protection of Wetlands)

	Protection of Water Quality	
1	In cooperation with the States of Oregon and Washington, the Forest will use the following	See below
1a	Select and design BMP's based on site-specific conditions, technical, economic, and institutional feasibility, and the water quality standards for potentially impacted waters.	Met under Alternative 3. See Appendix 1A (Site specific WQMPs) and Appendix 2 (Generl Requirements) which identify measures to be take to protect and monitor water resources. See also Appendix 7 (Analysis of Effects for each Plan) and the Water Resources section of Chapter 3 of the EIS.
1b	Implement and enforce BMP's.	Meets Alternative 2 & 3 as this is new direction for the Forest Service to follow on all
1c	Monitor to ensure that practices are correctly applied as designed. Monitor to determine the effectiveness of practices in meeting design expectations and in attaining water quality standards.	Will be partially met in alt 2 as normal process is to do random monitoring and site inspections on district mining activities? Will meet in alt 3 as monitoring and site inspections are planned specifically on those sites.
1d	Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMP's do not perform as expected.	Met under Alternatives 2 and 3. See Appendix 1A (Site- specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. Also see Chapter 2 of the EIS for discussion of the minerals administration annual monitoring and inspections.
1e	Adjust BMP design standards and application when monitoring shows that beneficial uses are not being protected and water quality standards are not being achieved to the desired level. Evaluate the appropriateness of water quality criteria for reasonably assuring protection of beneficial uses. Consider recommending adjustment of water quality standards.	Met under Alternatives 2 and 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water resources. Also see Chapter 2 of the EIS for discussion of the minerals administration annual monitoring and inspections.
2	Use the existing process agreements to implement state water quality management plans on lands administered by the Forest as described in Memorandum of Understanding between:	See below

2a	The Oregon Department of Environmental Quality and U.S. Department of Agriculture, Forest Service (2/12/79 and 12/7/82), and "Attachments A and B" referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest Lands in the Pacific Northwest 12/78 and Best Management Practices for Range and Grazing Activities on Federal Lands, respectively).	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water quality (i.e. stream temperatures, turbidity). Also see discussion regarding compliance with the 2010 John Day Basin TMDL in Appendix 7 under "Other Potential Water Resource Impact" and in the Water Resources section in Chapter 3 of the EIS.
2b	The Washington Department of Ecology and U.S. Department of Agriculture Forest Service (7/79), and 'Attachment A' referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest Lands in the Pacific Northwest 12/78).  For a more complete explanation of the above, refer to Appendix E in the FEIS, 'Best Management Practices'. Individual, general Best Management Practices are described in <i>General Water Quality Best Management Practices</i> , Pacific Northwest Region, 11/88, which provides guidance but is not a direction document. A description is included of the process, limitations, and use of the BMP's.	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water quality (i.e. stream temperatures, turbidity). Also see discussion regarding compliance with the 2010 John Day Basin TMDL in Appendix 7 under "Other Potential Water Resource Impact" and in the Water Resources section in Chapter 3 of the EIS.
3	Evaluations of both the ability to implement BMP's and their estimated effectiveness will be made at the project level. Projects may include general BMP's, site-specific BMP's or combinations of both.	Met under Alternative 3. See Appendix 1A (Sitespecific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor surface resources. Annual inspections of mining sites monitor effectiveness of BMPs (see Inspection Items, BMP Monitoring and Stream Monitoring sections of Chapter 2).

4	Management activities will not degrade water quality, fish, or aquatic resources below the water quality goals except in temporary change due to permitted activities (FSM 2526). See Riparian/Fish Forest-wide Standards and Guidelines and Best Management Practices (BMP's).	Met under Alternative 3. See Appendix 1A (Site-specific WQPMs) and Appendix 2 (General Requirements) which identify measures to be taken to protect and monitor water quality (i.e. stream temperatures, turbidity). Also see discussion regarding compliance with the 2010 John Day Basin TMDL in Appendix 7 under "Other Potential Water Resource Impact" and in the Water Resources section in
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